AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A lipid-based drug delivery system for ~~administration of~~ administering an active lysolipid drug substance, which is not a substrate for lysophospholipase, to tissues expressing increased levels of extracellular PLA2, comprising:

(a) a prodrug lipid derivative ~~which is not a substrate for lysophospholipase, said prodrug lipid derivative comprising:~~having:

(1) an alkyl-linked aliphatic group of a length of at least 7 carbon atoms;
(2) an acyl-linked organic radical having at least 7 carbon atoms; and
(3) a hydrophilic moiety, and

(b) at least one lipopolymer or glycolipid

wherein said prodrug lipid derivative is in an inactive form and serves as a substrate for extracellular phospholipase A2 which hydrolytically cleaves the acyl-linked organic radical off of said inactive prodrug lipid derivative thereby liberating ~~an~~ the active lysolipid drug.

2. (Previously Presented) The drug delivery system according to claim 1, wherein the lipopolymers or glycolipids are represented by at least a fraction of the prodrug lipid derivative.

3. (Previously Presented) The drug delivery system according to claim 1, wherein the polymer of the lipopolymer is selected from the group consisting of polyethylene glycol, poly(lactic acid), poly(glycolic acid), poly(lactic acid)-poly(glycolic acid) copolymers, polyvinyl alcohol, polyvinylpyrrolidone, polymethoxazoline, polyethyloxazoline, polyhydroxypropyl methacrylamide, polymethacrylamide, polydimethylacrylamide, and derivatized celluloses.

4. (Previously Presented) The drug delivery system according to claim 1, wherein the organic radical is an auxiliary drug substance or an efficiency modifier for the active drug substance.

5. (Previously Presented) The drug delivery system according to claim 1, wherein the prodrug lipid derivative has the following formula:

$$\begin{array}{l} CH_2\text{-}X\text{-}R^1 \\ | \\ CH\text{-}Y\text{-}R^2 \\ | \\ CH_2\text{-}Z\text{-}R^3 \end{array}$$

wherein
X and Z independently are selected from O, CH_2, NH, NMe, S, S(O), and $S(O)_2$;

Y is -OC(O)-, Y then being connected to R^2 via either the oxygen or carbonyl carbon atom;

R^1 is an aliphatic group of the formula Y^1Y^2;

R^2 is an organic radical having at least 7 carbon atoms;

where Y^1 is $-(CH_2)_{n1}-(CH=CH)_{n2}-(CH_2)_{n3}-(CH=CH)_{n4}-(CH_2)_{n5}-(CH=CH)_{n6}-(CH_2)_{n7}-(CH=CH)_{n8r}-(CH_2)_{n9}$, and the sum of n1+2n2+n3+2n4+n5+2n6+n7+2n8+n9 is an integer of from 9 to 29; n1 is zero or an integer of from 1 to 29, n3 is zero or an integer of from 1 to 20, n5 is zero or an integer of from 1 to 17, n7 is zero or an integer of from 1 to 14, and n9 is zero or an integer of from 1 to 11; and each of n2, n4, n6 and n8 is independently zero or 1; and Y^2 is CH_3 or CO_2H; where each Y^1-Y^2 independently may be substituted with halogen or C_{1-4}-alkyl,

R^3 is selected from phosphatidic acid (PO_2-OH), derivatives of phosphatidic acid and bioisosters to phosphatic acid and derivatives thereof.

6. (Previously Presented) The drug delivery system according to claim 5, wherein R^2 is an aliphatic group having a length of at least 7 carbon atoms.

7. (Previously Presented) The drug delivery system according to claim 6, wherein R^2 is a group of the formula Y^1Y^2.

8. (Previously Presented) The drug delivery system according to claim 1, wherein at least a fraction of the prodrug lipid derivative is of the formula defined in claim 5, wherein R^3 is a derivative of phosphatidic acid to which a polymer selected from the group consisting of polyethylene glycol, poly(lactic acid), poly(glycolic acid), poly(lactic acid)-poly(glycolic acid) copolymers, polyvinyl alcohol, polyvinylpyrrolidone, polymethoxazoline, polyethyloxazoline, polyhydroxypropyl methacrylamide, polymethacrylamide, polydimethylacrylamide, and derivatized celluloses, is covalently attached.

9. (Previously Presented) The drug delivery system according to claim 1, wherein the prodrug lipid derivative constitutes 15-100 mol% of the total dehydrated lipid-based system.

10. (Previously Presented) The drug delivery system according to claim 1, wherein the lipopolymer constitutes 1-50 mol% of the total dehydrated system.

11. (Previously Presented) The drug delivery system according to claim 1, wherein the lipid-based system is in the form of liposomes .

12. (Cancelled)

13. Cancelled)

14. (Original) A pharmaceutical composition comprising the lipid-based drug delivery system according to claim 1 and optionally a pharmaceutically acceptable carrier.

15. Previously Presented) A method for selectively drug targeting to neoplastic cells within the mammalian body having extracellular phospholipase A2 activity which is at least 25% higher compared to the normal activity in said areas, by administering to the mammal in need thereof an efficient amount of the lipid-based drug delivery system according to claim 1.

16. (Previously Presented) A method of treating a mammalby administering to the mammal in need thereof an efficient amount of the lipid-based drug delivery system according to claim 1.

17. (Previously Presented) The method according to claim 16 for the treatment of diseases or conditions associated with a localized increase in extracellular phospholipase A2 activity in mammalian tissue.

18. (Original) The method according to claim 17, wherein the diseases or conditions are selected from the group consisting of inflammatory conditions and cancer.

19. (Original) The method according to claim 18, wherein the type of cancer is selected from the group consisting of brain cancer, breast cancer, lung cancer, colon cancer, ovarian cancer, leukemia, lymphoma, sarcoma and carcinoma.

20. (Original) The method according to claim 15, wherein the increase in extracellular phospholipase A2 activity is a least 25% compared to the normal level of activity in the tissue in question.

21. (Previously Presented) The method according to claim 20, wherein the lipid-based drug delivery system becomes localized in a diseased tissue after administration and which after degradation by extracellular phospholipase A2, leads to an increase in membrane permeability of cells in the diseased tissue.

22. (Cancelled)

23. (Previously Presented) The method according to claim 20, wherein the lipid-based drug delivery system becomes localized in a diseased tissue after administration, wherein degradation of the lipid-based drug delivery system by extracellular phospholipase A2 in the diseased tissue is accelerated by a localized increase in temperature in said tissue.

24. (Original) The method according to claim 15 for the treatment of diseases or conditions selected from the group consisting of inflammatory conditions and cancer.

Claims 25 – 56 (Cancelled)